

DERWENT-ACC-NO: 1983-08941K

DERWENT-WEEK: 198304

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TITLE: Electrochemical measuring  
elements - for oxidising or  
reducing substances in aq.  
soln.

----- KWIC -----

Whether the first (second) electrode is to act  
as the anode (cathode)  
depends on whether the material in the aq. soln.  
having electrochemical  
reversibility, is oxidising or reducing. The two  
electrodes face each other a  
short distance apart to allow the liq. subjected to  
measurement to pass through  
the second porous electrode. (J52009489)

DERWENT-ACC-NO: 1999-107238

DERWENT-WEEK: 200174

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TITLE: Control circuit for clocked  
DC motor - has choke  
connected between  
positive/negative voltage supply to  
motor and positive/negative  
terminal of electrolytic  
condenser plus freewheeling  
diode

----- KWIC -----

A control circuit for a clocked DC motor has an electrolytic condenser and a freewheeling diode wired in parallel. Between the positive voltage supply to the motor and the positive terminal of the condenser is connected a choke. The diode lies with its cathode between the choke and the condenser along with its anode on the negative side of the motor. This is then repeated with 'positive' and 'negative' interchanged as well as with 'cathode' and 'anode' interchanged. Between the choke and the positive/negative supply voltage is wired an inversely driven n-channel power MOSFET as a protection against incorrect polarity connection.

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DERWENT-ACC-NO: 1976-C9374X

DERWENT-WEEK: 197613

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TITLE: Magneto-discharge vacuum  
gauge - has potentiometer and  
capacitor for compensating  
capacitive current in  
magnetron-type manometer

----- KWIC -----

To produce a manometer capable of measuring very low pressures, and to increase the life of the manometer, the proposed vacuum gauge of the magnetron type (1) consists of electrodes (2 and 3), each of which depending on the phase of the generating potential becomes either cathode or anode, an a.c. transformer (5) with high and low voltage secondary winding, a meter for measuring an a.c. ion current (6), and a compensating system including a potentiometer (9) and capacitor (10). When a high voltage potential is applied to the electrode (2) through a resistance (11), a discharge takes place in the manometer (1) in the presence of a magnetic field. The cathode is bombarded by ions, which means that both electrodes (2 and 3) are in turn bombarded by ions. As the result of sputtering of the cathode, the surface of the electrodes remains free of deposit. In order to increase the

range of measurements  
towards low pressure; the current which is caused  
by the capacitance of the  
manometer (1) has to be compensated. This is done  
by adjusting the resistance  
(9) in the compensating system (8). Experiments  
have shown that pressure  
ranging between 102 and  $5 \cdot 10^{-7}$  mm can be measured  
by means of the device  
described above.

DERWENT-ACC-NO: 1970-50432R

DERWENT-WEEK: 197028

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TITLE: Electrolysis or electric  
permeation pro - cesses  
commutation of electrode  
polarity

----- KWIC -----

Polarity commutating electrode consists of cathode (Ti or Ta) and anode (e.g. Ti plated with Pt), each of which has a terminal for electric current application, and positioned so as not to be in contact. Current is applied to the anode or the cathode depending on whether the electrode is to be used as anode or cathode respectively.